ABSTRACT OF THE DISCLOSURE

A machine monitoring system and method uses a machine monitoring device (MMD) which is connected to the monitored machine. Outputs from the machine are attached to input connectors on the MMD. The MMD receives inputs from the machine via the input connectors and performs desired transformations. Results of the transformations are stored in an on-board database system within the MMD. Reports on machine status, quality, maintenance, production, and performance are generated by consulting the database system. Reports can be generated at fixed intervals or on demand and may be transmitted over a network. A server, such as a web server or the like, resident within the MMD makes reports remotely viewable from client computing devices on the network via web page interfaces or the like and also allows for remote configuration of the MMD via such interfaces. The monitoring device also has output connectors for transmitting MMD output signals, such as digital output signals or the like, that may be used for activating buzzers, lights or email notifications that can be escalated. MMD output signals may also be used for pausing or stopping machines.